(e) *In-use verification.* The durability program must meet the requirements of § 86.1845–01.

(f) Information obtained under §§ 86.1845–01, 86.1846–01, 86.1847–01 or from other sources shall be used by the manufacturer in developing new durability processes and/or updating existing durability processes using good engineering judgment.

[64 FR 23925, May 4, 1999, as amended at 65 FR 6863, Feb. 10, 2000; 65 FR 59974, Oct. 6, 2000]

§ 86.1824–07 Durability demonstration procedures for evaporative emissions.

§ 86.1824–07 includes text that specifies requirements that differ from those specified in § 86.1824–01. Where a paragraph in § 86.1824–01 is identical and applicable to § 86.1824–07, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.1824–01.''. This section applies to gasoline-, methanol-, natural gas- and liquefied petroleum gas-fueled LDV/Ts, MDPVs, and HDVs.

(a) through (f) [Reserved]. For guidance see § 86.1824–01.

[66 FR 5192, Jan. 18, 2001]

§ 86.1824–08 Durability demonstration procedures for evaporative emissions.

This section applies to gasoline-, methanol-, liquefied petroleum gas-, and natural gas-fueled 2008 and later model year vehicles which meet the applicability provisions of § 86.1801. Optionally, a manufacturer may elect to use this section for earlier model year gasoline-, methanol-, liquefied petroleum gas-, and natural gas-fueled vehicles which meet the applicability provisions of § 86.1801. Eligible small volume manufacturers or small volume test groups may optionally meet the requirements of §§ 86.1838–01 and 86.1826–01 in lieu of the requirements of this section. A separate durability demonstration is required for each evaporative/refueling family.

(a) *Durability program objective.* The durability program must predict an expected in-use emission deterioration rate and emission level that effectively represents a significant majority of the distribution of emission levels and deterioration in actual use over the full useful life of candidate in-use vehicles of each vehicle design which uses the durability program.

(b) *Required durability demonstration.* Manufacturers must conduct a durability demonstration which satisfies the provisions of either paragraph (c), (d), or (e) of this section.

(c) *Whole vehicle evaporative durability demonstration.* (1) Mileage accumulation must be conducted using the SRC or any road cycle approved under the provisions of § 86.1823(e)(1).

(2) Mileage accumulation must be conducted for either:

(i) The applicable full useful life mileage period specified in § 86.1805, or

(ii) At least 75 percent of the full useful life mileage. In which case, the manufacturer must calculate a df calculated according to the procedures of paragraph (f)(1)(ii) of this section, except that the DF must be based upon a line projected to the full-useful life mileage using the upper 80 percent statistical confidence limit calculated from the emission data.

(3) The manufacturer must conduct at least one evaporative emission test at each of the five different mileage points selected using good engineering judgement. The required testing must include testing at 5,000 miles and at the highest mileage point run during mileage accumulation (e.g. the full useful life mileage). Additional testing may be conducted by the manufacturer using good engineering judgement. The manufacturer may select to run either the 2-day and/or 3-day evaporative test at each test point using good engineering judgement.

(d) *Bench aging evaporative durability procedures.* Manufacturers may use bench procedures designed, using good engineering judgement, to evaluate the emission deterioration of evaporative control systems. Manufacturers may base the bench procedure on an evaluation the following potential causes of evaporative emission deterioration:

(1) Cycling of canister loading due to diurnal and refueling events,

(2) Use of various commercially available fuels, including the Tier 2 requirement to include alcohol fuel;

(3) Vibration of components;